SOME

LEADING ARGUMENTS

AGAINST

COMPULSORY VACCINATION.

Issued by the London Society

for the

Abolition of Compulsory Vaccination.

LONDON:

E. W. ALLEN, 4, AVE MARIA LANE.

1887.

Digitized by the Internet Archive
in 2015

https://archive.org/details/b21363444

PROFESSOR ALFRED FOURNIER AND VACCINATION.

SIR,—By a curious coincidence, the same number of the *British Medical Journal* (March 26) that publishes in its medico-parliamentary department Mr. Ritchie's reply to Mr. McArthur, in the House of Commons, as to the development of the signs of syphilis after the vaccination age, and the consequent danger of imparting this disgusting malady to infants by means of the vaccine lymph, also publishes a review of a recent work which confirms by the strongest proofs the danger of vaccination, owing to the false security created, through the non-recognition of this important pathological fact. This work is entitled "La Syphilis Hereditaire Tardiæ. Lecons Profesées par Alfred Fournier, Professeur à la Faculté de Medicine de Paris, &c. Avec 31 Figures par Alfred Forgeron. Paris: G. Masson, 1886. Pp. 650." The *British Medical Journal* says that M. Fournier's object is to establish the following propositions: "That the hereditary influence of syphilis is not limited to producing manifestations in early life, but continues to a much later period: that sometimes it does not show itself at all until a period more or less remote from infancy; that either with or without manifestations in infancy it may cause specific lesions either in childhood, youth, or adult life; and, lastly, that such syphilitic lesions are nearly always attributed to serofula. . . . . The last part of the volume," says the reviewer, "is occupied with the subject of acquired syphilis in children, and the various points in which it resembles and differs from the inherited form of disease are fully noticed, as well as the many accidental ways in which young children may acquire syphilis." As neither the President of the Local Government Board, nor the Medical Department by whom it is believed the answer to Mr. McArther's important question was formulated, appear to be aware of the researches either of Mr. Jonathan Hutchinson or Mr. Brudenell Carter, it is important that attention should be directed to the momentous evidence disclosed in the work of Professor Fornier. The Medical Department of the Local Government Board will herein find a solution for the serious increase of infantile syphilis, the causes of which they have so long and so determinately ignored.—Yours faithfully, WILLIAM TEBB.

Devonshire Club, St. James's, April 6.

"Echo" April 9. '87

so patient. It should be borne in mind tha
Scotch colliers ordinarily earn less than a
pound a week; so any deductions from their
wages fall upon them with cruel severity.
The condition of these men is so intoler-
able that the members of the Trades Con-
gress Parliamentary Committee are justified in
saying that "in many ways they have been as
"much enslaved as were the negroes of America
"before their emancipation." In point of fact,
the condition of many plantation negroes was far
happier than that of these bondsmen of capital
Sir ROBERT FOWLER, at the Mansion House the
other day, refused point-blank to put the law
in motion for a loanmonger who tried to wring
an extortionate rate of interest from his victims
Such a man is a paragon of virtue by the side
of some of these Scotch capitalists. Their
primary device is to pay wages fortnightly
monthly, and in some cases even quarterly
The condition of wage-earners at, say,
pound a week who are thus treated may b
easily imagined. The majority of them ar
driven to live upon credit. Order notes are give
to the workmen by the managers or cashiers, an
these notes are exchanged for goods at certai
shops; in the majority of cases these shops a
either owned by the employers or by someon
connected with the firm. This is bad enoug
but the worst remains to be told. Whe
the order note system does not prevail, ca
advances are made. The wretched victi
of this system are, as a rule, charged fi
per cent. per fortnight for the money whi

LEADING ARGUMENTS

AGAINST

COMPULSORY VACCINATION.

DURING the year ending September 29, 1885, two thousand eight hundred and six persons in England and Wales were prosecuted under the Vaccination Acts. (*Judicial Statistics, England and Wales,* 1885.) Large as these figures are, they represent but a small fraction of the total amount of actual resistance. In many large towns like Leicester, Oldham, Keighley, Gloucester, Dewsbury, the law is at the present moment openly or covertly abandoned, and, prosecutions being stopped, disobedience does not affect the judicial statistics. Now, even supposing, for the sake of argument, that this opposition to the law is misguided, still its extent makes it none the less serious. For the men who thus feel themselves compelled in conscience to set a statute at defiance and to take all the consequences, are in all other relations of life blameless before the law, and act under a deep sense of responsibility and an earnest conviction of duty. To the character of such men it is unnecessary to call direct testimony, though abundance of such testimony is to hand, for it must be obvious that no careless or indifferent parent will face the repeated penalties of the vaccination laws to save his child from harm. In all the weary years of this medical persecution, amongst all the thousands of convictions obtained during those years, no drunkard has ever been convicted yet. This law has no terrors for the idle, careless, or dissolute; it reserves all its pressure for the conscientious and the thoughtful. How terrible that pressure is upon the poor may be estimated from a glance at the law itself, and at its results.

WHAT THE LAW ENACTS.

Taking the law as it is laid down in all the Vaccination Acts viewed collectively, we have it as the intention of that law to enforce that on every child born within the realm shall

be inflicted, before it is three months old, an acute specific disease known as Vaccinia. The wishes and desires of the parents are to be in no way consulted. The acute specific disease may have had effects fatal to one of their children, such effects involving a death of unspeakable and prolonged agony; but of this the law takes no cognisance, and insists that other children of such parents shall be submitted to the same operation. Thus, in October, 1882, a Report was presented to Parliament of the Government Inquiry into the deaths of four children in Norwich, who had died from the effects of vaccination performed in the preceding June by Dr. Guy, the Public Vaccinator. The Report was embodied in a Blue Book, No. 385, 395, of 1882; and shortly after its presentation, Mr. Dodson, then President of the Local Government Board, was asked whether the deaths of these children would constitute a "reasonable excuse" under the Act for the non-vaccination of any subsequent children of the same parents; and Mr. Dodson was compelled to reply from his place in Parliament, that it would not. It is only necessary to realize for a moment the amount of mental suffering inflicted by an attempt to carry out the law within a home so situated, to reflect what kind and what intensity of feeling the law would thus claim to override, in order to have to confess that in the amount of its departure from the principle of *laisser-faire*, in the extent of its interference with personal liberty and the boasted sanctity of each man's home, the vaccination law stands alone.

And, as it is exceptional in its own nature, so it has been exceptional in the amount of the suffering it has inflicted upon many whom it has vainly tried to subdue. Let us take a few cases of this kind of persecution, that we may see what have really been the

RESULTS OF THE LAW.

In a Return to the House of Commons, No. 289, 1881, was embodied such information as could be procured respecting the infliction of *repeated* penalties under the Vaccination Acts. Only the initials were given of the persons concerned; but in the return from Kent, p. 5, we find that a certain "C. W. N." suffered no less than nine periods of imprisonment, one being of seven days, one of fourteen, and seven periods of one month each. This "C. W. N." is Charles Washington Nye, a watchmaker of Chatham, who suffered these imprisonments in Canterbury and Maidstone gaols between 1869 and 1877, and who, though not sentenced to hard labour (the law

allowing of no such sentence), was set to barrow-running and similar work, and kept at it till, in his own words, "the handles of every barrow that I wheeled were stained with my blood." Thus physical suffering, and a strong risk of permanently losing aptitude for delicate manual operations, were added to long and repeated terms of imprisonment, under a law in regard to which the House of Commons was assured at its passing that there was "not the remotest danger" of prosecution degenerating into persecution.

Again, we find that, under the same law, Charles Hayward, of Ashford, in Kent, has been fined fourteen times since May, 1885, for the non-vaccination of his children, the Board of Guardians declaring that "they must go on now or they would look so foolish."

Turning to Ireland, we have the case of Mr. John Savage, of Kinsale, thirty-one times prosecuted under vaccination law. He holds out, according to his own account, owing to the serious and probably permanent injury inflicted by vaccination on his eldest daughter; and his convictions have been strengthened by other and fatal cases, of which he has been an eye-witness.

Sadder things remain. It has been pointed out that the death of one child, confessedly from vaccination, is no bar to proceedings for the non-vaccination of a second child. It may be objected that, though such may be the law technically, that law would never be carried out. The reply is simply that it has been carried out, as in the case of William Smallman, summoned at the Kent County Police Court, on November 24, 1876, for neglecting to have his child, Emma, vaccinated. His wife attended for him, and urged that vaccination had killed her other child. The Magistrates' Clerk, Mr. G. H. Knight, said that, even if that were true, it was no answer to the case in law. Mrs. Smallman produced the copy of the certificate of death of her last child, the cause of death being given as, "First, vaccination; second, erysipelas;" the certifying medical man being J. D. Brown, M.D., of Rochester. The mother proceeded to say:—"At the time of my child's death, my husband was out of work, and, if it had not been for the kindness of two lady friends and my neighbours, I should have died, too, for want of food as well as rest. I sat up nine days and ten nights, and the tenth day my child died." The Chairman, having heard what the mother had to say, fined defendant 5s. and 8s. costs; in default of sufficient distress, seven days' imprisonment. He advised the defendant to have the child vaccinated, or he would get into further trouble.

Upon this case, and particularly the concluding threat of the magistrate, the writer of these lines cannot trust himself to comment.

A striking incident of the struggle for freedom at Leicester —now happily successful—was the arrest of one William Ball, for non-payment of vaccination fines. The police found him seated, with his four children kneeling round him, engaged in their evening prayers. The English Parliament should ask itself in all seriousness, "Is this the kind of man whose body you want for an English gaol, and whose hostility you want for English law?"

Such cases might occupy all the space available. One more must be mentioned, as showing to what a length may go the dread of vaccination in those who have once had to endure its extreme effects as a cause of suffering and sorrow. In the *Daily Chronicle* for August 26, 1882, will be found an account of the suicide of one Mary Clarke. Rightly or wrongly, she believed that she had lost one child by vaccination, and when notice was served on her, insisting on her having her next one vaccinated, under threat of a prosecution which she had neither means to escape nor money to meet, she tore up the floor of her room, beneath which was a cistern, and drowned therein herself and her babe together. Thus are the feeble and the poor crushed by a law which is defied by the triumphant thousands of Leicester, Keighley, Dewsbury, Oldham, Bingley, Gloucester, and which gives not a moment's anxiety to any man with money in his pocket or friends by his side. And it becomes a matter of some curiosity whether there can ever have been any defence of such a state of things, whether, in fact, there can be found any

JUSTIFICATION FOR SUCH A LAW.

It may be urged that, however hard special cases may appear to be, such cases are very few after all, and that the majority of the population view the law with favour. Whereunto it is answered that *every* case of prosecution for conscience sake is a hard case; that so far from these cases being few, they are reckoned by tens of thousands, and, were the law really carried out, would be reckoned by numbers many times as great; whilst so far from the majority being in favour of the law, the vast majority is the other way. The following censuses have been taken with the utmost care, and are, as far as they go, as reliable as any inquiry conducted by private individuals can possibly be.

The places canvassed include manufacturing, agricultural

mining, and residential towns, fashionable watering-places, four cathedral cities, and districts both in the South, East, and West-end of the Metropolis, and it is believed furnish a fair average test of the state of public opinion upon this much-disputed question. Voting-papers have been left with every householder, with the following questions to be answered and signed :—

1. Do you approve of vaccination ?
2. Ought vaccination to be compulsory ?
3. Have you met with cases of injury or death following vaccination ? and, if so, please state the particulars.

So far as the inquiry has extended, as will be seen below, the results show overwhelming majorities against compulsory vaccination, and decisive majorities against the practice of vaccination itself.

	In favour of Compulsion.	Against Compulsion.	Do not believe in Vaccination.
Ashford, Kent	312	1242	927
Aylestone Park	12	309	264
Banbury	109	957	Not stated.
Barnoldwick and five adjacent villages ...	52	912	735
Bath	1373	4482	3295
Biggleswade	57	666	594
Broadway (group of seven villages, Worcestershire)	29	644	604
Broughton Moor	0	66	64
Burnley (Brierfield)	41	498	397
Carlisle (street of)	52	89	60
Chesterfield	243	1109	823
Clarendon Park (Leicester suburb) ...	6	121	97
Cockermouth	163	420	
Dearham (Cumberland)	40	242	213
Dukinfield	221	2273	1967
Eaglesfield	6	35	23
Earlstown and Newton	179	1121	829
Eastbourne	250	1319	1043
Failsworth	57	789	629
Gloucester	353	3870	3143
Gravesend	433	1132	901
Hitchin and Stevenage	93	649	579
Homerton Ward, Hackney	292	1348	890
Hull (Coltmann Ward)	104	1134	992
Hurst	138	1397	1103
Hyde	153	1405	1070
Ilfracombe	216	327	234
Kennington	186	1720	1537
Keswick	51	168	121
Kettering	71	1879	1607
Leicester (part of)	438	7068	5931
Lewes	246	817	592
Lincoln	854	5371	3922
Luton (part of)	84	1389	1209

	In favour of Compulsion.	Against Compulsion.	Do not believe in Vaccination.
Maryport	202	650	523
Mattock Bank	35	301	210
Melbourne, Derbyshire	55	367	217
Nelson, Lancashire	81	1651	1353
Oldham (St. Mary's Ward)	145	2465	2048
Paddington, Queen's Park	295	1321	937
Peterborough	154	1271	945
Rastrick, Brighouse	20	922	844
Rushden and six neighbouring villages ...	47	1158	984
Scarborough...	301	1780	1261
South Leeds...	240	1855	1285
Thrapston	15	167	115

This list is growing daily, and will be incomplete before these pages are read. But, so far, it gives a total in favour of compulsion of 8,504, as against 60,878 opposed to it. Thus, less than 13 per cent. are imposing their will on the remaining 87 per cent. of the population. In many of the towns and villages the third question was not submitted, but 1,996 cases of injury and 428 deaths, alleged to be due to vaccination, are returned by the remaining signatories, in many instances with full circumstantial detail. The bulk of these returns, which comprise in all 65 towns, districts, and villages, have been brought before the Prime Minister and the President of the Local Government Board.

In addition to the testimony thus collected, public meetings have been held in large numbers all over the country. These meetings have been perfectly open to all comers, and resolutions condemnatory of the vaccination laws have been passed either unanimously or by overwhelming majorities. And this not only in districts known to be favourable to the repeal movement, but also in places where the law was being severely put in force against recalcitrants few in numbers, and where, if anywhere, public opinion might have been expected to be on the side of the law and its enforcement. Of such a nature was one of the most recent of these meetings, held at Ashford, Kent, where, at a largely-attended gathering in the Corn Exchange, on Feb. 23, 1887, the following resolution was passed with but two dissentients:—

"That in the opinion of this meeting the continued persecution by the Ashford Board of Guardians of Charles Hayward and others, who, acting on the conscientious belief that the operation is useless or dangerous, have refused to permit the vaccination of their children, is deserving of the severest censure; and this meeting further calls for the immediate repeal of laws which place in such unfit hands powers so readily abused."

It is certain that no free public meeting could now be held at which resolutions could be passed in favour of the existing law.

But, secondly, it may be urged that the law should be maintained, because

"VACCINATION IS SO USEFUL AGAINST SMALLPOX."

Before this position can be fairly estimated, we must ask—Of what kind is the utility? And here we obtain, not one reply, but several, each less encouraging than its predecessor. The original Act of 1853 was passed on the assumption of the truth of Jenner's own statement, that "what renders the cowpox virus so extremely singular is, that the person who has been thus affected is *for ever after* secure from infection of the smallpox, neither the exposure to the variolous effluvia nor the insertion of the matter into the skin producing this distemper." Thus, the original claim made on behalf of vaccination was that it conferred absolute and perpetual immunity from smallpox. Nor was this merely the enthusiastic dream of an over-sanguine inventor. This plea passed the law of 1853, and the same plea defended it when passed. In the Blue-book of 1857 Mr. John Simon published his "Papers Relating to the History and Practice of Vaccination," and therein we read on p. xiv.:—

"On the conclusion of this artificial disorder, neither renewed vaccination nor inoculation with smallpox, nor the closest contact and cohabitation with small-pox patients, will cause him [the vaccinated patient] to betray any remnant of susceptibility to infection."

Nothing could be more precise or emphatic than these words, unless it be the contradiction they have subsequently received from facts and from later theorists. That one vaccination protects against "renewed vaccination" is a claim sufficiently disposed of by the advocacy by Dr. Warlomont, of Brussels, of a system of *vaccinization*, or the repetition of the operation every four months, until the operation refuses to "take" any further; and by the wail of Dr. Collingridge, Medical Officer of Health for the Port of London, that smallpox will never be extirpated until a thoroughly efficient system is established of compulsory *annual* vaccination. The remainder of Mr. Simon's extraordinary statement is easily disposed of by an appeal to the facts of the case. Thus, in the epidemic of 1871, amongst the patients admitted to the Highgate Hospital, 91·5 per cent. had been vaccinated; and in 1881, in the same hospital, of 491 patients, 470, or 96 per cent., were in like case; and this at a time when not more than 90 per cent. of the London population was claimed as vaccinated by the Local Government Board. *Thus, not only do vaccinated people take smallpox,*

but the ratio of vaccinated cases to total cases is at least as great as the ratio of vaccinated population to total population. Nor is the case altered when we pass from the smaller details of particular hospitals to the larger and more general returns. Smallpox is essentially an epidemic disease; it comes and goes in ways at present but little understood. Of these epidemics there have been three of very considerable magnitude since 1853, when vaccination first began to be enforced upon the people by penalties. For these epidemics the returns stand thus:—

	Date.	Deaths from Smallpox.
1st.	1857–58–59	14,244
2nd.	1863–64–65	20,059
3rd.	1870–71–72	44,840

Increase of population from 1st to 2nd epidemic ... 7 *per cent.*
Increase of Smallpox in the same period nearly 50 *per cent.*
Increase of population from 2nd to 3rd epidemic ... 10 *per cent.*
Increase of Smallpox in the same period ... ... 120 *per cent.*

It may be objected that this is selecting the epidemic years only. The objection is worthless, because of the essentially epidemic nature of the disease. If vaccination is not to be judged by its influence on epidemics it cannot be judged at all. To credit vaccination with the absence of smallpox when smallpox is absent, and refuse to discredit vaccination with the presence of smallpox when smallpox is present, may be official, but it is not logic. Taking, however, the objection as it stands, it can be met by examining the returns for periods of years—say, decades—thus:—In the period where we get the first law passed, from 1851 to 1860, we have 42,000 deaths from smallpox; in the second decade, 1861 to 1870, we have 34,700 deaths; and in the last decade, 1871 to 1880, we have 57,422 deaths, or, comparing the two decades which immediately succeeded the passing of the first act, we obtain—

From 1854 to 1863 ... 33,515 deaths from smallpox.
From 1864 to 1873 ... 70,458 „ „

An attempt may be made to maintain the position of absolute protection by arguing that vaccination must at least have protected many persons, since smallpox has undoubtedly declined on the whole during the past century; and by instituting a comparison in this respect between smallpox and other diseases. There is here, however, a threefold error. Firstly, the statistics of the last century are unreliable in themselves, and are vitiated in this case particularly by the

practice of inoculation; secondly, the decline of smallpox, as an effect, does not by any means prove that vaccination was the cause of that effect; and, thirdly, the comparison thus challenged is by no means favourable, when fairly carried out, to the claims of vaccination. Without vaccination the terrible scourge of cholera, which has but recently spread as far as the further shores of our seas, has been denied a footing here. It is not vaccination that keeps cholera out. Plague is a thing of the past, with no vaccine to aid in its extinction. Typhus fever is now rarely seen. Gaol fever in the days of the Stuarts gave a terrible significance to the phrase, "Rot in gaol"; but without the aid of vaccination sanitation has found its way into our prisons, and has driven gaol fever out. Passing from those diseases which have practically ceased from amongst us to others of which we still have detailed returns, we must premise the caution that the comparison must be instituted between smallpox and other diseases sufficiently similar to render the comparison a fair one. Smallpox as a zymotic disease should be compared with other zymotics.* Let, then, such a comparison be instituted between smallpox and that great class of diseases closely allied to it, and grouped together under the name of fever—viz., typhus, typhoid, and simple continued fever, and let the same periods be taken (with the exception of the years 1847-49, for which the Registrar-General does not give the figures for fever), as were used by Sir Lyon Playfair in the Vaccination Debate in the House of Commons, in 1883, and see what is the result :—

	Deaths per Million Living.	
	Smallpox.	Fever.
1850–53	310	986
1854–71	223	940
1871–80	156	473

Now, if the ratio of the first to the last period of smallpox death-rate be compared with that of the fever death-rate, it will be found that the latter shows a decline 2 per cent. greater than the former; and the difference left to be accounted for by vaccination, therefore, on this reckoning, becomes a minus quantity. Curiously enough, this same concomitant decline of fever and smallpox was noted by Dr. Farr as having occurred at the beginning of the century at a time when smallpox was said to be flying before the advent of vaccination. Dr. Farr says :—"Fever has progressively declined since 1771; fever has declined in nearly

* This comparison is taken from *Sir Lyon Playfair's Logic*, by W. J. Collins, M.D., M.S., B.Sc. (Lond.), F.R.C.S. (Eng.).

the same proportion as smallpox," and the figures he gives are these*:—

	Deaths per 10,000 Living.		
	1771–80	1801–10	1831–35
Fever	621	264	111
Smallpox	502	204	83

Thus smallpox is shown not to have declined, whatever the influence on it of vaccination, faster than other similar well-ascertained diseases. But the evidence does not stop here. Looking at the London returns, we find the Registrar-General writing in his 1880 Report on the decennium then ending:—

"It will be found that the saving of life was almost entirely due to the diminished mortality from causes whose destructive activity is especially amenable to sanitary interference—namely, the so-called zymotic diseases . . . . The death-rate from fever fell nearly 50 per cent. . . . . That of scarlatina and diphtheria fell 33 per cent. . . . . One disease alone in this class showed exceptionally a rise, and no inconsiderable one. This was smallpox, which, owing to the two great outbreaks of 1871–72 and 1877–78, gave a death-rate nearly 50 per cent. above the previous average."

That is to say, in the case of the one disease against which we are using special prophylactic measures—special measures which are complete, because they are made complete by law—these special prophylactic measures are followed by an increase of that disease, and of that disease only. Sanitation, a splendid success—vaccination, a dismal failure.

Clearly, then, vaccination does not protect from an attack of smallpox. But, next, we may have to meet the claim of

MITIGATION.

It may be said that, though vaccination cannot prevent the attack, it can, and does, prevent mortality from that attack. Such a position has been set up in the *Times*, and has respectable medical authority to support it. Thus we read in Dr. Husband's "Student's Hand-book of Forensic Medicine," p. 559, that vaccination "was once put forth as a perfect prophylactic to smallpox, but the repeated occurrence of epidemics of that disease has somewhat shaken the faith once reposed in it. . . . The proper view to take of vaccination appears to be this: *that it does not prevent smallpox, but modifies its virulence.*" Now on this deliverance two remarks must be made at starting. First, that this is not the ground on which the law enforcing vaccination by penalties was originally passed, nor on such a ground would it ever have been passed. It is all very well to say *now* that you have given up the doctrine of absolute protection. The abandon-

* McCulloch's *Statistics of the British Empire.*

ment is well, but better still would be the memory that it was by preaching this doctrine that the law was obtained; and having been obtained on the strength of representations thus found to be false, common honesty points to its surrender. And, secondly, the claim of mitigation involves on the face of it a knowledge no man can possess, the knowledge, namely, of how badly a vaccinated person *would have had* smallpox had he not been vaccinated. Before Jenner was born smallpox was of all degrees of severity, and so it is to this day. In 1722 Dr. Wagstaffe wrote of smallpox:—"So true is that common observation, that there is one sort in which a nurse cannot kill, and another which even a physician can never cure." Yet this mitigation argument, by ascribing all mild cases in the vaccinated to the effect of their vaccination, assumes that all unvaccinated cases must be of a severe type—a *petitio principii* of the most outrageous order.

Taking, however, the plea as it stands, we may bring against it the evidence of Dr. Leander Josef Keller, Medical Director of the Austrian State Railways. Examining the reports of the sixty-eight medical men employed under him in attending, during the epidemic years 1872 and 1873, upon a population of some 55,000 to 60,000 persons of all ages, Dr. Keller arrived at the following table so far as the incidence and mitigation of smallpox are concerned:—

		VACCINATED.			UNVACCINATED.		
		Cases.	Deaths.	Deaths p.c.	Deaths p.c.	Deaths.	Cases.
In the First Year of Life.	1st Quarter...	1	1	100	66	22	33
	2nd ,, ...	16	11	69	42	30	71
	3rd ,, ...	16	9	56	39	22	57
	4th ,, ...	16	7	44	35	14	40
Total 1st year ...		49	28	57	44	88	201
1 to 2 years ...		40	21	52	39	30	77
2 ,, 3 ,, ...		41	14	34	18	10	56
3 ,, 4 ,, ...		64	14	22	17	13	77
4 ,, 5 ,, ...		55	13	24	14	10	73
5 ,, 10 ,, ...		234	45	19	8	9	116
10 ,, 15 ,, ...		189	12	6	12	6	48
15 ,, 20 ,, ...		275	17	6	7	3	42
20 ,, 30 ,, ...		364	27	7	9	5	54
30 ,, 40 ,, ...		219	33	15	16	5	32
40 ,, 50 ,, ...		78	14	18	17	1	6
50 ,, 60 ,, ...		40	14	35	33	2	6
60 ,, 70 ,, ...		11	7	64	40	2	5
Total under 2 years		89	49	55	42	118	278
,, over 2 ,,		1,570	210	13·37	12·82	66	515

Comparing the percentage of deaths to cases, the columns distinguished by thicker type (and by this comparison alone can the question of mitigation be determined), we find that the vaccinated class get the worst of it in every age-period up to ten years; and only seem to begin to have an advantage after an age at which we are now often assured that vaccination has worn out by lapse of time, and the protection requires renewing.

The next plea is more serious, but still more easily met. It consists in an appeal to the alleged

HIGH DEATH-RATE OF THE UNVACCINATED.

This is even said to range as high as 64 per cent. of cases. But the key to the puzzle is the golden number 18. All who wish to understand the vaccination controversy should hold fast the memory of the number 18. For 18 is the percentage death-rate from smallpox before Jenner introduced vaccination, and when everybody was unvaccinated. When, therefore, we are told by a medical man of a mortality of 64 per cent., or of anything greater than 18 per cent., of cases amongst the unvaccinated, let us never forget to do in his presence this little subtraction sum, and to ask him the question thence arising:—

Unvaccinated death-rate *after* Jenner	64
Ditto ditto *before* Jenner	18
Then who kills the remaining	46?

These figures *must* be false; for their truth would involve a charge against medical men of wilful murder of their unvaccinated patients, in order to prop up a belief in vaccination; and every man who would ridicule the idea of an accusation so preposterous, is bound also to ridicule as heartily the no less preposterous death-rates recounted of the unvaccinated. The truth is, not that the patients died because they were unvaccinated, but that they were reported unvaccinated because they died. Overwhelming proof of this position awaits the appointment of a Royal Commission.

This brings us to some recent utterances of Mr. Ritchie, in his capacity as President of the Local Government Board.

In a recent debate in the House of Commons, Mr. Ritchie said—or was reported to have said—that in London, in 1881, there were 782 deaths from smallpox amongst 55,000 unvaccinated patients. But if 782 had really died out of 55,000, that would be at the rate of 14,218 per million. Now, the

London mortality for the last twenty years of the eighteenth century, *when all were unvaccinated,* is given by Dr. Farr as 1,740 per million. That is to say, we are gravely asked to believe that, in spite of all improvements in medicine made in the interval, the unvaccinated are now dying rather more than eight times as fast as they used to do in the last two decades of the last century.

Or, to put it another way. The eighteenth-century small-pox death-rate of 1,740 per million would have given not quite 96 deaths amongst the 55,000 unvaccinated of Mr. Ritchie's figures. But we are told that 782 really died. Then, again, we have—

Deaths at 19th-century rate	...	...	782
,, at 18th-century rate	...	...	96
Difference	...	...	686

So we are asked to believe that nineteenth-century doctors have allowed 686 patients to die whom eighteenth-century doctors would have saved. Such figures are not merely erroneous, they are wildly impossible.

Again, Mr. Ritchie, replying to a question as to the increase of infantile syphilis since the enforcement of vaccination, is thus reported in the *Times* of Feb. 25 of this year:—

Vaccination and Disease.

"In answer to Mr. Channing, Mr. Ritchie said,—I have communicated with the Registrar-General, and am informed that, so far as can be gathered from the old reports, the mortality of children from syphilis has increased not only from 1853, when compulsory vaccination was introduced, but from the first year of which any records exist—namely, 1848. The increase from 1853 to 1885, the last year for which the figures are published, was not most conspicuous among children under one year of age. On the contrary, it was much greater among children from one to five years old than among children under one (1). The increase in 1854, as compared with 1853, was greater than in any other year as compared with its immediate predecessor. But the increase, so far from being most conspicuous among children under one, was vastly less among them than among children over one and under five, and even less than among adults, or rather of persons from five years upwards (2); so that it is quite impossible to attribute the increase in 1854 to the introduction of compulsory vaccination."

Seldom has an answer of equal brevity disclosed so much error.

(1.) The great increase of syphilis among children over five years of age, so far from disconnecting that disease from vaccinal causes, only goes to confirm the opinion of a surgeon

so eminent as Mr. Brudenell Carter, when he says, writing in the *Medical Examiner* of May 24, 1877:—"I think that a large proportion of the cases of apparently inherited syphilis are in reality vaccinal; and that the syphilis in these cases does not show itself *until the age of from eight to ten years*, by which time the relation between cause and effect is apt to be lost sight of."

(2.) Mr. Ritchie here tramples cruelly on the work of his own Department. For in the recently-published "Extracts from the Annual Report of the Medical Officer for 1884," in a foot-note to page vii. we read these words:—"The appearance of increase dates from thirty years ago, *since which time the rate of mortality registered as from syphilis has been practically stationary.*" Now for infants under one year of age this practically stationary mortality is fully recorded in the Parliamentary Return ("Deaths, England and Wales, No. 392, Sess. 2, 1880"), and these are the figures so far as that Return goes:—

Years.		Deaths per Million Births.	Years.		Deaths per Million Births.
1855	...	912	1867	...	1,615
1856	...	881	1868	...	1,733
1857	...	989	1869	...	1,760
1858	...	1,044	1870	...	1,794
1859	...	1,128	1871	...	1,652
1860	...	1,121	1872	...	1,707
1861	...	1,146	1873	...	1,658
1862	...	1,217	1874	...	1,736
1863	...	1,351	1875	...	1,827
1864	...	1,471	1876	...	1,780
1865	...	1,544	1877	...	1,746
1866	...	1,565	1878	...	1,851

thus showing that this syphilis mortality has rather more than doubled itself among *infants*, while Mr. Ritchie now adds to our sense of security and completes the demolition of his own Medical Officer, by blandly assuring us that bad as the case is among infants, it is far worse for children up to the age of five. It is a sickening thought that the lives and happiness of thousands of children are *by law* placed every day at the mercy of such work as this.

Again, Mr. Ritchie has recently repeated in another form the blunder about the Statistical Society, into which he was innocently led by a want yet greater than his own of knowledge of the matter in hand. There never was, as Mr. Ritchie at first asserted there had been, an inquiry by that Society into the Vaccination Question, nor has there been, as Mr. Ritchie now alleges, any discussion of the Vaccination Question by that Society within the last two years. The last discussion of

it by the Statistical Society was in June, 1882, when the late Dr. Guy read a paper, which then and there received at the hands of Dr. Collins a criticism which many present held to have been utterly destructive, and which was judiciously not reported by the Society's reporter.

Finally, Mr. Ritchie declines an open inquiry because, to put his argument in brief, "they know all about this question at the Local Government Board." They certainly ought to know a good deal, for the opponents of the practice of vaccination have been at much pains to teach them. They have been supplied with information as to the syphilization of 58 Zouaves in one regiment in Algiers. They have been told of the communication of severe skin disease to 320 children and adults in Rügen, by vaccination with official lymph obtained from the Vaccine Institute at Stettin. They have been informed of the cases of death and injury disclosed by the censuses all over England. They are aware that a recent Medical Inquiry, conducted by medical men, of whom Dr. Drysdale, the well-known pro-vaccination controversialist, was chairman, brought to light 30 medical witnesses to death and 242 to injury, due to vaccination. They know the terrible series of cases evidenced by Mr. Jonathan Hutchinson in his "Illustrations of Clinical Surgery." They cannot but know that Dr. Cory, their own Chief Instructor in vaccine, with a devotion worthy of a better cause, syphilized himself in an endeavour to prove vaccino-syphilis impossible. They must know that the cases proven at Misterton, at Darley, at Norwich, 13 in all, show 13 deaths from vaccination, of which deaths *only one* gave rise to a death certificate with "Vaccination" on the face of it; the proven proportion of suppression of the truth to the revelation of it being thus 12 to 1. They know that Mr. Henry May, Medical Officer of the Aston Union, advised in cases of death from vaccination to omit all mention of it from the death certificate in order "to save vaccination from reproach." They know that, nevertheless, the Registrar-General has received 290 certificates of death from "Cowpox and other effects of vaccination" in the last five years. They know that $290 \times 12 = 3{,}480$. They know that Mr. John Simon promised us that under this law there should be "no loss to count" (*Papers*, p. lxvii.). All this and much more to the same purport they know, and further inquiry should certainly be needless.

Space only remains for a very few more points very shortly treated. We may be asked about Montreal, which in former years resisted vaccination, and which has recently been visited with a severe smallpox epidemic. The answer is, that

the resistance to vaccination had died away before the epidemic came, and the city was well vaccinated at the time of the visitation; and also that Montreal is a frightfully unsanitary place, and well suited, therefore, to breed any zymotic, whether with or without vaccination. Dr. W. B. Carpenter, in his letter to Sir Lyon Playfair, p. 14, testifies that "vaccination is now (1883) as well carried out in Montreal by its Officers of Health as in any of the other cities in the Dominion."

The German Re-vaccination Law of 1874 is another favourite point. Since 1874 Germany has been almost as free from smallpox as unvaccinated Leicester itself. We are called on to admit that re-vaccination can "stamp out" smallpox. To which we answer (1), Re-vaccination by law dates from 1835 in Prussia, and not from 1874. It was enforced by No. 27 of the Gesetz-Sammlung für die Königlichen Preussischen Staaten, which regulated all matters vaccinal for Prussia, and the date upon that law is 1835. It decrees an original vaccination, a second vaccination at school age, and, passing from college to college, it enacts that the pupil must necessarily produce a vaccination certificate which is not more than two years old. It enforces re-vaccination on entering the Prussian army, and at the end of the compulsory clauses there are words to the effect that if the patient objects, the vaccination is to be carried out by the application of force. We find the *Pall Mall Gazette* of May 24, 1871, declares to us that the re-vaccination law has been carried out with the utmost conscientiousness by the German authorities. Yet the result was that Prussia in 1871, in spite of her vaccination and re-vaccination, lost by smallpox 69,839 of her citizens, that being two and a-half times the smallpox death-rate of London. Moreover, re-vaccination by law is not the question in England, and never will be. Re-vaccination here is simply a red herring across the scent.

We may be asked how we can resist the general consensus of medical opinion? We deny the consensus. On no point of vaccine theory or practice do medical men agree. Thus, if we ask how many scars ought to be made, the answer comes thus:—

Drs. Drysdale and Lee ...	say	1
Dr. Adam (Liverpool) ...	says	2
Dr. Greenhalgh (Cavendish Square)	„	3
Dr. Seaton	„	4
Dr. Sandwith (Wandsworth) ...	„	5
Dr. Debenham (Commercial Road)	„	6
Dr. Curschmann ...	„	12 (6 on each arm.)
Dr. Bond (Gloucester)		Protection proportioned to number.

If we ask, how often we ought to perform the operation, we come on this state of things:—

Drs. Jenner, Thorpe Porter, and Pringle, say only once in a lifetime.
Dr. Seaton, repeat at puberty.
Sir W. Jenner, repeat at 7 years old, and whenever there is an epidemic.
Dr. Guy, don't vaccinate during an epidemic.
Dr. Tripe, repeat at 7 and 14 years.
Dr. Bernard O'Connor, repeat at 7, 14, and 21 years, and each time *vaccinize*, *i.e.*, repeat every 4 months till no effect results.
Dr. Oakes (Birmingham), every 10 years.
Dr. Collingridge, every year.

If we inquire whether vaccinia and smallpox are the same disease or different, we find that Marson, Simon, Badcock, Pavy, on the identity side, are fiercely resisted by Cameron, Warlomont, Fleming, and other champions of diversity. The contest is warm, and only Bristowe remains cool, with diversity in his first edition and identity in his third; compulsion, of course, in both.

Calf lymph or humanized? Again the din of controversy is deafening, Sir Thomas Watson, speaking of the "ugly blot" [syphilis] which has fallen on the arm-to-arm system, and Dr. Ceely declaring that animal vaccine would be likely to produce far more ailments and cutaneous eruptions than humanized; the German Commission recommending that "retro-vaccine" form of calf lymph which Dr. W. B. Carpenter declared to be "no good at all;" and the smallpox calf lymph of Mr. Badcock being still largely used both in Government and private vaccination in England, in spite of its being described by Dr. Cameron as "capable of propagating smallpox in its most virulent form by contagion," and of its use being declared illegal by the Local Government Board of Ireland.

The doctors agree in *nothing*. Opponents of vaccination will be perfectly satisfied if the law is only suspended until the consensus so much talked of is really arrived at amongst medical men.

Once more, it may be urged that the opponents of vaccination "cannot be permitted to endanger the community." But if the community is vaccinated, anti-vaccinators can only endanger it if vaccination is of no avail. If vaccination protects the vaccinated, the fate of the unvaccinated need be of no concern to those who are themselves safe. Whoever holds that vaccination only mitigates, can obtain at his own free choice whatever benefit the operation has to offer. Hence, the better thing vaccination is, the less *need* there is to enforce it; whilst the worse it is, the less *right* there is to

enforce it. And whosoever would compel the vaccination of others, *ipso facto* confesses that he has no faith in his own.

Finally, we may be asked what we would put in place of vaccination. If we proposed to remove the Irish difficulty,some people would want to know what we were going to substitute. But here our answer is plain. We would substitute personal and municipal Sanitation. This has already succeeded perfectly in Leicester. The following account of the state of things in Leicester, where smallpox has been exterminated without vaccination, is from the pen of Mr. Henry Dudgeon, of Quorn, near Leicester, a veteran sanitarian and opponent of vaccination.

LEICESTER AND VACCINATION.

During the last ten years municipal sanitation has advanced by leaps and bounds in our large towns, and its protective effect against the epidemic form of the zymotic diseases has been watched with an assiduity not always free from anxiety. The central point of interest is its action as a repellent of smallpox—a disease which the vaccine party have long proclaimed to be unassailable by sanitation, and controllable by vaccination alone. It has been persistently maintained that in the absence of the Jennerian operation the smallpox mortality would return to its former height of 3,000 per million as in the times preceding the year 1800; and the claim made for vaccination in the speech of Sir Lyon Playfair in the Commons in 1883 was that our successive reductions in smallpox mortality effected by our successive increases in vaccine compulsion have brought down its average from 3,000 to 156 per million. If we are expected to accept this theory, it ought to be shown that non-vaccinating populations—like Leicester, or those of their inhabitants who have either omitted the operation or neglected its due repetition—are resuming the average fatality of 3,000 per million attributed to the last century; and the reduction from that figure to 156 or less per million ought surely to be confined to places where vaccination has been successfully enforced. But the facts of everyday experience do not allow the protective power of municipal sanitation to be so easily set aside; and Leicester, whose anti-vaccine feeling dates from the distrust of the protective excited by local observation of its inutility in the epidemic times of 1872 and preceding years, can show that the deaths from the disease in the last fourteen years in the town and its hospital were not more than twenty, of whom it is currently believed that nineteen (if not the whole) occurred among the

vaccinated. And during this period the annual vaccinations have declined from 3,730 in 1873 to less than 1,000 in 1886.

It was, therefore, with much curiosity that the reply of the Local Government Board on March 1, 1887, to the question of Mr. Barran, of the comparative freedom of vaccinating and non-vaccinating populations in England from smallpox in the last ten years, was looked for; and it is satisfactory to observe indications of a gradual change of feeling in influential quarters on this most hotly-disputed question. Evidently, our arguments and our opinions are being weighed; and although our opponents are still able to notify to us that certain vaccinating towns can actually show a ten years' immunity equal to that of Leicester, the fact is barely a sufficient vindication of the policy of a compulsory infliction of a doubtful, unpopular, and increasingly-discredited medical dogma, which is already wincing under the apprehension of a Royal Commission of Inquiry into its proofs.

It is true that Leicester has as yet not wholly lost its infantile diarrhœa or its scarlatina; but the anti-vaccinators are persistently pressing the local authorities to effect the improvements in the sewerage which have so long been openly admitted to be necessary for the eradication of epidemic scourges. For scarlatina is now shown to be not impregnable to the influence of municipal sanitation. We cannot, indeed, admit the far-famed and unproved 3,000 per million before Jenner, seeing that the figures are more than three times as high as the more reliable ones of British India in recent years; but the Registrar-General tells us that in 1885 the scarlatina death-rate in England was extraordinarily low, being only 231 in a million living; while the average in the ten years 1862–71 was above 1,000 per million—a devastation probably equal to that of the smallpox in India. The almost uninterrupted decline of the scarlatina death-rate in England on a scale so similar to the decline in smallpox in this century (due correction being made for the imaginary 3,000 per million) may be taken as a proof that municipal sanitation is competent to deal with both diseases.

Other lands take up the cry that sanitation and not vaccination is the true prophylactic against epidemic smallpox. Let us look at the

RESULTS OF VACCINATION IN BRITISH INDIA.

The Government Blue-Book, entitled "Report on Sanitary Measures in India in 1884-85," is now issued. Of the population of 254,000,000 the number under registration

of death causes, &c., is 198,000,000. The year's deaths were 5,239,218, to which smallpox contributed 333,382, and fevers, 3,309,903. The vaccination staff of India is composed of 4,261 persons. The number vaccinated during the year by this special establishment was "no fewer than 5,834,871."

The facts and inferences in this Blue-Book in respect of smallpox and vaccination are of extraordinary interest, being characterised by an impartiality and an absence of the *suppressio veri* and the *suggestio falsi* not always observed on these questions, and which we are glad to recognize. From this and from previous Indian official reports we are able to compare the average smallpox death-rate per million of population in India with the more than doubtful 3,000 per million in England before 1800, which has so long been one of the chief pillars, if not the corner-stone, of the vaccine dogma, and from which has been deduced an inexact and misleading amount of fall in our smallpox mortality. Moreover, the fall thus constructed has been attributed by partisans to Vaccination alone, by omitting to make allowance for the aid and agency of modern sanitary amelioration. The Indian registration law has enabled us to give the smallpox death-rate per million of population for the eight years, 1877-84, as follows:—1,010, 1,690, 1,040, 370, 390, 420, 1,171, 1,680. The average is 970, and the assumption of 3,000 per million in England before 1800, made by the early vaccinators in the utter absence of reliable data, is, therefore, untenable. It will be seen that the Indian ratios for 1877-1880 show a decline, while those for 1881-1884 show an increase, and it is a telling circumstance that, while smallpox was gradually advancing, the vaccinations, with the aid of compulsory bylaws, were gradually and largely increasing.

More than a hundred pages of this official Blue-Book are occupied by the remarks of the Army Sanitary Commission on the provincial reports, from which we make the following extracts:—

"The Indian small-pox deaths in 1884 were 333,382. These figures show that the disease prevailed as a great epidemic, in face of the extensive vaccination service."

"The epidemic fell with great violence on the North-west provinces and Oudh, where no fewer than 202,541 victims died of it." Yet the vaccinations for the year were 568,372. In the previous year (1883) the victims numbered 138,641 in these provinces, "where for many years an active, and apparently not inefficient, vaccination service had been in existence." The average annual vaccinations during the

five years preceding 1884 were 622,394. The vaccinations of the six years amounted to a total of 3,577,106. Upon this the Army Commission observe:—

"We are thus brought face to face with the fact that, notwithstanding the existence of an active vaccination service, smallpox swept over the provinces just as if there had been none. It is clear that vaccination has been incompetent to deal with the disease in its epidemic form, as is shown by the large staff of 785 vaccination officials. These remarks are not intended to call into question the utility of vaccination. But, in presence of the facts, the question is a perfectly relevant one—namely, whether dependence can henceforth be placed on vaccination as a protection against a smallpox epidemic? The question, of course, answers itself. . . . . This and similar experience appears to show that the remedies, if such be available, will have to be extended beyond vaccination, and will have to deal with epidemic causes affecting localities and their inhabitants. If sanitary work be neglected, no more dependence against smallpox epidemics can be placed on vaccination than can be placed on quarantine against invasions of cholera. The true remedies lie elsewhere altogether (p. 203).

"The facts before us show where work requires to be done for lessening the liability of the people to attacks of the whole epidemic tribe of diseases, and amongst them of smallpox, which in an epidemic year escapes from the influence of vaccination alone, and occasions such results as we have described (p. 205).

"Drainage, water, and domestic cleansing should be included in the sanitary estimates of villages. The whole domestic sewage should be rigorously removed to a distance every day, and all cesspits abolished. This measure is the real foundation of Indian sanitary improvement, to which all others are secondary.

"In the present case the great smallpox epidemic ravaged the provinces in spite of the persistent efforts of the vaccination service; and it may be well, once for all, to recognize that what may be called 'epidemicity'—a condition of these epidemic diseases which may show itself at any moment—is connected directly with the conditions under which the people live, and that, when it has once shown itself, the penalty of past sanitary neglect is certain to be exacted in spite of all palliative measures" (p. 207).

As to the Central Provinces, "information about smallpox is deficient. The numbers of the vaccinated population increase without any corresponding decrease of mortality."

During the five years, 1880-84, there were 1,684,372 persons vaccinated, yet the smallpox deaths for the period were 20,523, being in 1880, 5,184; in 1881, 1,816; in 1882, 3,945; in 1883, 4,696; and in 1884, 4,882.

"This clearly shows that the remedy did not cover all the conditions of the disease. It, indeed, points to the progress of an epidemic in face of the vaccination. The highest death-rate of the five years was returned from Nimar district, and this district returned the highest vaccination ratio for the period of all the districts" (p. 210).

It is noticeable that Assam, which escaped smallpox, had, on the contrary, a very severe epidemic of cholera, which destroyed nearly 5,000 per million of its population.

The Commission observe that "sanitary work is essentially preventive in its nature, while dispensaries and fever hospitals are costly palliative expedients. Sanitary work requires forethought and skill, while the palliative measures only require money" (p. 230).

In Madras city the number of cases vaccinated in 1882 was 28,030; in 1883 it was 40,940; in the next fifteen months it was 66,507, and the Compulsory Act came in force on June 1, 1884. The smallpox deaths, which in 1883 were 1,957, increased in the next fifteen months to 4,074. The previous ten years' average was 733. "Public health in Madras has been deteriorating, not improving. It is perhaps the most unhealthy city in India." Its great mortality of 20,123 (50 in the 1,000 of population) is made up chiefly of epidemic diseases. The death-rate from all causes among children was enormous. Above a third of the entire mortality of the year took place in infants under one year of age. The number of infants vaccinated in 1884 and the first three months of 1885 was close upon the number born. In five depôts vaccination from the calf is performed free.

Vaccine compulsion is being gradually introduced throughout India. In 1884 it was enforced in 81 towns in the province of Bengal, and it had at that period been in existence in Bombay city for seven years, and in Karachi for five years. It was enforced in 1884 in the Amritsar municipality in the Punjab, "but here the deaths from smallpox were far more numerous than in any other town of the province." (Report, p. 85.)

It appears from this official publication that smallpox in India is essentially a disease of childhood. It is, therefore, difficult to show the need of adult re-vaccination, or even re-vaccination of schools, for, of the 615 smallpox deaths in the Hyderabad districts, all but 19 were under ten years of age

(p. 14). Vaccination is evidently powerless in the absence of sanitation, and it may therefore be fairly inferred from this Indian experience that in towns under proper sanitary arrangements as to water supply, sewage removal, &c., the Jennerian operation is superfluous, and its compulsory infliction a survival of the vague philanthropy of an age of pre-scientific prophylacticism.

Here, then, we close. The members of the London Society for the Abolition of Compulsory Vaccination have hastily compiled these few lines in view of the coming debate in Parliament. They venture to describe the Vaccination Law of England as *Unequal*, in that it crushes the poor and lets the well-to-do go free; *Cowardly*, in that it has not dared to force on the adult what it does force on the helpless infant; *Impolitic*, in that where it *fails* its failure undermines respect for law; *Immoral*, in that it can only *succeed* by forcing a man to save his cash at the expense of his conscience. Alike in the name of common sense, common humanity, and common righteousness, they claim and call for its repeal.

APPENDIX.

We here give a full examination of a very famous argument much used against anti-vaccinators, and which it was hoped had been thoroughly slain.

The Franco-German Army Statistic.

The imposing statistic of the Franco-German war of 1870 is a proof of the efficacy of vaccination long held up in front of the anti-vaccinators as irresistible and impregnable. It has been widely and continuously circulated from 1872 onwards, and is described in Dr. W. B. Carpenter's pamphlet (distributed among members of Parliament in 1883) as an evidence, "the cogency of which can scarcely be over-estimated." "In Germany (says Dr. C.) vaccination is compulsory in children under a year old, and every man on his entrance into the army is re-vaccinated. In France, on the other hand, vaccination is not compulsory, and re-vaccination is not enforced on army recruits. During the Franco-German war of 1870-71, the total number of deaths from smallpox in the German army was 263, while in the French army it was 23,469, or very nearly ninety times as great. . . . What reason is there to doubt that the adoption of compulsory re-vaccination in the French army would have saved a large proportion of the 23,469?"

The statistic can be traced back to a Vienna medical journal, and it was quoted in the *British Medical Journal* in 1872 in the following terms :— "According to a statement made at the Statistical Congress held this year in St. Petersburg, the total number of deaths from smallpox in the German army during the recent Franco-German war was 263. This small mortality is attributed to the system of compulsory vaccination which every man who enters the army must undergo. On the other hand, in the French army, where re-vaccination is not compulsory, the number of deaths, as stated by a French authority, was 23,469. 'This terrible difference' (says the *Wiener Medizin. Wochenschr.*) must puzzle the greatest opponents of vaccination.'" The editor of the *Anti-Vaccinator*, of Nov. 1, 1872, says, "This statement is open to very grave suspicion as to its accuracy." When these statistics were used in the debate on Mr. P. A. Taylor's motion in the Commons on June 19, 1883, that gentleman challenged the figures, and the result may be seen in a letter from Dr. B. W. Carpenter to the *Daily News*, of August 7, 1883, in the course of which he says, "I feel bound to make public what has recently come to my knowledge in regard to the number of smallpox deaths (23,469) alleged to have occurred in the French army during the war of 1870-1, which I stated in my letter to Sir L. Playfair, on authority which I had every reason to believe to be good. . . . The authority for the figures having been called in question, and an application to Dr. Colin (head of the

Medical Service of the French army) having elicited from him the reply that he did not know of any exact return of the total number of smallpox deaths in the French army, I requested Earl Granville to obtain what information he could on this point, and I have received through Colonel Cameron, the military *attaché* to the Embassy in Paris, an explicit statement that the army medical returns of the Franco-German war are so incomplete as not to supply the total for which I asked. . . . . The statement was cited as based on official returns, not only in various journals and publications, but also in a Report to the Reichstag in January, 1883, by Dr. Thilenius, who referred to Dr. Roth as the authority for it. If, in adopting Dr. Roth's estimate without any suspicion of its insecure basis, I have been blameworthy, I now make the fullest *amende* in my power."

This Franco-German statistic was introduced with great effect in the vaccination debate in the House of Commons in June, 1883, with the touching appeal, "Could a more pronounced experiment on a large scale have been made in regard to the value of vaccination?" Its unofficial figures had previously been officially reported to the German Reichstag by Dr. Thilenius (in January, 1883), with the oracular remark, "Up to the present time these overpowering facts have had no influence on the anti-vaccinators. Now, as ever, they persistently gainsay them." The statistic also influenced the decision in the vaccination debate in the Great Council of Berne in the following February:—"I will recall to your memory (said Herr Steiger) a fact not now for the first time brought into the discussions of the Great Council, but which cannot be mentioned too often—viz., the colossal difference between the French and German armies in 1870-1 in respect of smallpox. In 12 months the Germans lost 3,162 from this disease, and the French 23,469. In the present agitation in men's minds, I have thought it advisable, once again, to refresh your memories with these facts which do not occur every year; but, though a decade has now gone by, there they stand, a warning to the peoples."

The *Direktor des Innern* (Herr Steiger) further remarked that the French loss by smallpox was 35 times greater than that of the Germans. "This disproportion," he impressively assures his auditory, "cannot be explained by the absurd excuse that the French were disheartened and depressed by defeat and its consequences, and thereby more susceptible to disease and its fatality; for we find that in the instance of typhus the German army actually lost more than the French. It is not true that the French army practically suffered on a more extensive scale than the German from all diseases, for the colossal difference showed itself in smallpox alone."

The collapse of this once powerful statistic is a forecast of the risks to which the vaccine dogma is exposed, whenever the concession of a Royal Commission of Inquiry shall be granted.

WYMAN AND SONS, PRINTERS, GREAT QUEEN STREET, LONDON, W.C.